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Application of UV Technologies in Water and Wastewater Treatment

Guest Editors:

Prof. Dr. Bin Xu

College of Environmental Science and Engineering, Tongji University, Shanghai 200092, China

Prof. Dr. Wenjun Sun

School of Environment, Tsinghua University, Beijing 100084, China

Dr. Tian-Yang Zhang

College of Environmental Science and Engineering, Tongji University, Shanghai 200092, China

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Message from the Guest Editors

Ultraviolet (UV) technologies have been widely applied to water and wastewater disinfection due to their high sterilization efficiency and property of no disinfection byproduct (DBP) generation. In addition, UV-based advanced oxidation processes (AOPs) have also become a hot issue in water treatment. The strong oxidizing radicals produced during UV-based AOPs can accelerate both microbial inactivation and pollutant degradation. UV technologies have been proved to have many advantages in water and wastewater treatment, but identifying how to use it efficiently and safely remains to be further studied. At present, low- and medium-pressure UV mercury lamps are still the most commonly used UV sources in water plants. Therefore, it is worth exploring whether the introduction of these new UV light sources will make a difference in water and wastewater treatment. This Special Issue is devoted to the application of different UV technologies in water and wastewater treatment, including the improvement of traditional UV technologies and the development of novel UV light sources, as well as water security during UV treatment.



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Special issue



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Contact Us

Water Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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